



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/751,144	12/31/2003	Samuel A. Sangokoya	OR-7289	1754
7982	7590	01/31/2006	EXAMINER	
EDGAR SPIELMAN			LU, C CAIXIA	
ALBEMARLE CORPORATION			ART UNIT	PAPER NUMBER
451 FLORIDA BLVD.				
BATON ROUGE, LA 70801			1713	

DATE MAILED: 01/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/751,144	SANGOKOYA ET AL.	
	Examiner Caixia Lu	Art Unit 1713	

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-58 is/are pending in the application.
  - 4a) Of the above claim(s) 33-58 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 1-32 is/are rejected.
- 7) Claim(s) \_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

<ol style="list-style-type: none"> <li>1)<input type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2)<input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3)<input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____.</li> </ol>	<ol style="list-style-type: none"> <li>4)<input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____.</li> <li>5)<input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6)<input type="checkbox"/> Other: ____.</li> </ol>
--	--

## DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 3 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the range from 2 to 10 mole%, does not reasonably provide enablement for the new end point of "8 mole %" defined range. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims. The new end point 8 mole % defined range is new matter.

### ***Claim Rejections - 35 USC § 112***

4. Claims 6, 15 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In the instant claims respectively, the use of relative term "partially" in the limitation "partially halogenated aluminoxane" renders the instant claims indefinite because the Applicant has failed to provide the metes and bounds of "partially halogenated aluminoxane".

***Claim Rejections - 35 USC § 102/103***

5. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Kioka et al. (US 6,063,726) for the same rationale as set forth in the previous Office action mailed September 12, 2005.
  
6. Claims 1-13 and 15-32 are rejected under 35 U.S.C. 103(a) as obvious over Kioka et al. (US 6,063,726) for the same rationale as set forth in the previous Office action mailed September 12, 2005.

***Response to Arguments***

7. Applicant's arguments filed December 15, 2005 have been fully considered but they are not persuasive.

Applicants indicate the instant claims further limit the haloaluminoxane composition to the neutral aluminoxane; however, due to the lack of definition of the relative term "partially", the limitation of "partially halogenated aluminoxane" is still indefinite.

To traverse the rejection under 35 U.S.C. 102(b), Applicants argue that Kioka does not use a halogenated aluminoxane wherein a=30 and b=3. As indicated in the previous Office action mailed September 12, 2005, Kioka claiming a halogenated aluminoxane of formula (II), wherein a and b independently are numbers of 3 to 30. Therefore, it is the examiner's position that Kioka anticipates the minimum halogen level of the end point of about 10 mole% when a=30 and b=3 and such a end point encompasses the instant claims. In rejections under 35 U.S.C. 102(b), the working example anticipating the claims is not required, all that is needed is that the cited prior

anticipates the claimed limitation. Applicants' arguments regarding unexpected results are irrelevant to the rejections under 35 U.S.C. 102(b).

Applicants assert that nowhere does Kioka select or suggest an amount of halogen relative to aluminum in the range about 0.005 to about 0.15 because Kioka teaches  $a = 0$  to 80 and  $b = 0$  to 80 in Kioia's formulas (II) and (III). This is illogical. Within Kioka's broad range of  $a = 0$  to 80 and  $b = 0$  to 80 cited by applicants, or in the narrow range as claimed in Kioka's claim 1, for example when  $a=30-80$  and  $b=1-3$ , the amount of halogen relative to aluminum is in the range of 0.0125 to 0.100 which is in the range about 0.005 to about 0.15.

Applicants argue that there is no *prima facie* case of obviousness over Kioka's teaching because there is no motivation or suggestion to modify the teachings of Kioka. First of all, there is no need to modify Kioka's teaching to come up with the instant claims because the halogen relative to aluminum in the range of Kioka's haloaluminoxane overlaps with the range of about 0.1 to 0.15 of the instant claims. There is no better motivation than the direct teaching of the cited prior art. Secondly, the showing of unexpected results is not commensurate with the scope of the instant claims. For example, in Tables 2 and 3 of the instant specification, compared to the nonhalogenated aluminoxane, inferior or same or little increase catalytic activities are shown when F is 0.5, 1 or 2 mole%, both are in the range of the instant claims. Applicants need to show unexpected results, such as much improved activity, for all halogens, F, Cl, Br, and I in the whole halogen mole% range of the instant claims including both of the low end and the high end of the claimed range.

As correctly indicated by the applicants and shown in the previous Office action, Kioka does use hydrolyzation of alkyl aluminum method to prepare the neutral halogenated aluminoxane which is the same as those of the instant claims. In a rejection of a product-by-process claim, the process for making the product in the reference relied upon for rejections need not be made by the same as the process as that of the rejected claims. While the product is defined by the product, the product is not limited to the process. Applicants must identify the different between the product of the cited prior art and the product of the instant claims in order to overcome the rejection.

In view of the foregoing, the rejections of records are still deemed to be proper and thus maintained.

***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 1713

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Caixia Lu whose telephone number is (571) 272-1106. The examiner can normally be reached from 9:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful and the matter is urgent, the examiner's supervisor, David Wu, can be reached at (571) 272-1114. The fax numbers for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1700.

  
Caixia Lu, Ph. D.  
Primary Examiner  
January 25, 2006